

SPACE PLATFORM PROJECT NEWSLETTER

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HIGHLIGHTS

- Both Richard Branson and Jeff Bezos have announced their intention to participate to suborbital flights, which may occur respectively on July 4, 2021 and July 20, 2021
- China has successfully launched 3 taikonauts to begin occupation of the country's new Tianhe space station
- 40% of the world population experience economic disruption and rising worries during the pandemic (OECD survey); the combination of perceived inequality and loss of income could drive grievance and social unrest

UNITED NATIONS / GLOBAL

- Progress was made on outstanding issues for the next UN climate conference (COP26) on November 1-12, 2021 in Glasgow, UK during the Bonn Climate Change (virtual) Conference
- The UN Committee on the Peaceful Uses of Outer Space (COPUOS) is exchanging views on potential models for the exploration, exploitation and utilization of space resources and space debris mitigation and remediation measures
- A new technique for searching alien life was developed, based on the fact that waves of light reflected by biological organisms travel in either clockwise or counterclockwise spirals
- 12 nations have endorsed the 2020 USsponsored Artemis Accords, which outline best practices for safe and sustainable exploration beyond Earth

INTERNATIONAL

EU AND US

- The EU and US committed to strengthen their cooperation on space by building on the Galileo – GPS Agreement; this could include making progress on access to Galileo's PRS signal, engaging on space-based EO to support climate policies and emergency services and exchanging on respective approaches on STM
- They have committed to the Paris Agreement and its effective and strengthened implementation and intend to by example through becoming net zero greenhouse gases (GHG) economies no later than 2050 and implementing respective enhanced 2030 targets

EUROPE AND AFRICA

Capacity building, innovation and entrepreneurship in downstream applications were reviewed during the Europe-Africa Space Earth Observation High-Level Forum, which took place in Lisbon on June 10-11, 2021

EU AND JAPAN

The EU and Japan **committed to a new Green Alliance** to work towards climate neutrality and accelerate the transition of both economies towards becoming climateneutral, circular and resource-efficient in the coming decades

US AND UK

- The US and UK agreed to draw on their extensive diplomatic, defence, security, civil and scientific cooperation to ensure space is a safe and secure environment for all
- They pledged to promote the framework of responsible State behaviour in cyberspace, arms control, disarmament, and proliferation prevention measures to reduce the risks of international conflict
- They committed to continue building an inclusive, fair, climate-friendly, sustainable, rules-based global economy for the 21st century and to act urgently and ambitiously to tackle the climate crisis, protect biodiversity and sustain nature

US AND KOREA

Korea and the US **agreed to strengthen cooperation in civil space exploration** as well as 6G and green energy to secure global competitiveness

CHINA AND RUSSIA

Following the signature of the MoU, Russia and China unveiled a **roadmap** for a joint International Lunar Research Station (ILRS) to guide collaboration and development of the project The ILRS is developed in competition with the US Artemis lunar exploration program

EUROPEAN UNION (EU)

EU SPACE PROGRAM, EUROPEAN COMMISSION AND EUSAP

- A launch event about the EU Space program was organized on June 22, 2021 during which the European Commission, EUSPA and ESA signed a Financial Framework Partnership Agreement (see The Blog)
- EUSPA is consulting until September 2021 on a technology and service road map for the Galileo Public Regulated Service (PRS) user segment and market uptake up till 2027
- EUSAP is organising the Galileo Masters Ideas to leverage satellite communications with GNSS positioning and/or EO could be submitted until July 19, 2021
- EUSPA is consulting until end of June 2021 on future services that public safety and disaster relief organisations can offer to Europe's citizens
- The EC is studying how the future evolution of European GNSS (EGNSS) could be beneficial for autonomous applications

NEXTGENERATION EU

- The European Commission (EC) issued its first bounds (€20 billion, <01 % interest) under the NextGeneration EU instrument to help funding projects covered by the national recovery and resilience plans (this is the largest ever issuance from a European public sector institution–national or European); the EC envisages to raise €80 billion in bonds by the end of 2021
- All National recovery and resilience plans have been officially submitted; certain, are currently under review and a number of plans have already been approved; The European Parliament would like to be involved in such as review and approval process

EU COUNCIL

The Council adopted its conclusions entitled New Space for People on May 28, 2021 The Council welcomes the European Commission (EC)'s CASSINI initiative, targeting a \in 1 billion EU space fund-offunds, and calls on the EC to propose an innovation strategy for New Space, encompassing the whole value chain and access to finance

HORIZON EUROPE

 The first calls for the Horizon Europe program are open The documents setting out the timelines and scope of €147 billion worth of grants to be awarded over the next two years were released Calls on the green deal and smart cities will open in respectively 2021 and 2022

- 11 European partnerships to boost investments in research and innovation and overcome major climate and sustainability challenges have been launched, including in areas such as cloud, open science artificial intelligence, data and robotics. photonics, processes4planet, built4people, batteries and automate d mobility
- An agreement has been reached regarding the participation of scientists and companies from the UK, Switzerland and Israel to join quantum and space projects

LIFE PROGRAM

The LIFE program to combat climate change has been **launched** with a **budget of €54 billion** for 2021-2027 **The first calls will be launched in Q3/2021**

CLIMATE CHANGE

The European Commission published a working document on **closing the climate protection gap** It regrets the almost complete absence of mechanisms in place to collect, assess or report economic losses from weather and climate-related extreme events The space ecosystem can help filing that gap

SINGLE MARKET PROGRAM

The Single Market Programme (SMP) was **launched** and the **first calls are open**

KNOWLEDGE CENTRE ON EARTH OBSERVATION

The website of the Center is **operational** It is for instance highlighting the role played by

space, satellites, drones and 5G to protect the cultural heritage (4 projects supported by ESA and the Italian Space Agency)

JOINT RESEARCH CENTRE (JRC)

The Joint Research Centre has **adopted its work programme** for 2021-2022, which includes to analyse industrial environments for security, defence and space, looking at value chains and their criticalities from a technological and strategic autonomy angle

EUROPEAN DEFENCE FUND (EDF)

The EDF became **reality**, with a **budget of €79 billion** for 2021-2027 (with between 4 to 8% for breakthrough innovation) The EC is building a "space window" into the EDF

EUROPEAN DEFENCE AGENCY (EDA)

Emerging propulsion technologies for air and space were discussed during a workshop

EUROPEAN INNOVATION COUNCIL (EIC)

The EIC is organizing an informative online **workshop** on opportunities for space SMEs on Jube 30, 2021

EUMETSAT

The joint European-US Copernicus **Sentinel-6** operational mission is **measuring sea level rise**, a key indicator of climate change



- 10,000 people have applied for ESA's astronaut recruitment program
- Contracts to design and build the first batch of the second generation of

Europe's **Galileo** navigation satellites have been signed

- Eligible companies from Lithuania can submit applications to ESA's Global Space Markets Challenge (deadline extended to June 30, 2021 for all)
- Mobile app developers and specialists in artificial and machine learning related to EO are invited to join the Space App Camp from July 20 to September 20, 2021
- ESA's summer school on satellite navigation has been postponed to July 2022
- A partnership was formed with a private entity to work on **quantum communication in space**
- An ESA BIC opened in Greece



CONGRESS

- Pam Melroy was confirmed by the Senate as deputy administrator of NASA and Rick Spinrad as NOAA administrator
- NASA asked the Senate to provide additional funding so NASA can develop a second lunar lander
- The US Innovation and Competitiveness Act passed Senate The draft bill contains provisions on space matters, which will have to be reconciled with the House
- A new bill would add space to the 16 sectors currently classified as critical infrastructure by the Department of Homeland Security, which need to be protected by federal government guidelines
- The 21st Century Space Grant Modernization Act was introduced, to revise provisions relating to the

National Space Grant College and Fellowship Program

- A draft Bill directs NASA to undertake a comprehensive review of the domestic supplier preferences
- A draft Bill to extend US commitment to the ISS, develop advanced space suits and authorize a steppingstone approach to exploration was introduced

THE WHITE HOUSE & NATIONAL SPACE COUNCIL

- Vice President Kamala Harris will lead the National Space Council, which will handle a number of existing and new policy priorities
- Purchase or sale of securities or derivatives of persons and entities (and other activities) relating to a certain number of Chinese entities, including aerospace entities, was prohibited by Presidential Executive Order



- NASA released its fiscal year 2022 budget, asking for \$248 billion to support a number of new and existing science and exploration programs, including proposed increases for planetary science and exploration programs and a proposed budget for the Human (Moon) Landing System (HLS) program
- There are calls to **set July 4, 2026**, the say the US will celebrate the 250th anniversary of its independence, **as the day for humans to return to the Moon**
- NASA is seeking proposals for two new private astronaut missions to the ISS as part of the agency's efforts to open space to more people than ever before

DOD

The Space Development Agency intends to work with commercial operators of imaging satellites to **send data directly to US government satellites in orbit**, without having to download it to ground stations



Paul Bate will be the next CEO of the UK Space Agency



Glavkosmos JSC (part of Roscosmos) released information for potential customers willing to go as **tourists to the ISS**

<u>CHINA</u>

- China has launched three astronauts into orbit to begin occupation of the country's new space station
- China released its **guide** for partnership for its lunar exploration program
- Tianwen-1 probe on Mars is operational and has released new images



• The Parliament approved legislation that allows companies to extract and utilize space resources That bill is similar to the

2015 US Commercial Space Launch Competitiveness Act as well as legislation passed by Luxembourg and the United Arab Emirates

• JAXA and Philippine Space Agency signed a MOU
